

Sexual Activity of Adolescent School Girls in an Urban Secondary School in Cameroon

Pascal Foumane ^{1*}, Andreas Chiabi ¹, Christelle Kamdem ², Francisca Monebenimp ³, Julius Sama Dohbit ¹, Robinson Enow Mbu ⁴

1- Department of Gynecology and Obstetric, Faculty of Medicine and Biomedical Sciences, University of Yaoundé 1, Yaoundé Gynaeco-Obstetric and Pediatric Hospital, Yaoundé, Cameroon

2- Department of Gynecology and Obstetric, Faculty of Medicine and Biomedical Sciences, University of Yaoundé 1, Yaoundé Military Hospital, Yaoundé, Cameroon

3- Department of Pediatrics, Faculty of Medicine and Biomedical Sciences, University of Yaoundé 1, University Teaching Hospital, Yaoundé, Cameroon

4- Department of Gynecology and Obstetric, Faculty of Medicine and Biomedical Sciences, University of Yaoundé 1, Central Maternity, Yaoundé, Cameroon

Abstract

Background: The objective of this study was to describe the extent of sexual activity in adolescent school girls.

Methods: This was a cross-sectional study with prolective collection of data carried out at Lycée General Leclerc, Yaounde (Cameroon), from October 1 to November 30, 2011. Heterosexual coitus was considered as sexual activity. A pretested self-administered questionnaire was proposed to all consenting girl students aged 10 to 19 years. The data were analyzed using Epi Info 3.2.1 and Microsoft Excel 2007 software.

Results: Of the 2660 students who responded to the questionnaire, 21.3% (566) admitted being sexually active. Out of these, 64.3% (364) were aged between 10 and 16 years at their first heterosexual contact. The mean age at the first sexual intercourse was 15.3 years. Although 56.4% (319) of the sexually active respondents had only one sexual partner, 43.6% (247) of them had at least two partners. Sexual activity was occasional in 71.4% of those being sexually active. Meanwhile, 52.1% (295) of the sexually active adolescent girls used condoms during sexual intercourse, 41.5% (235) did so occasionally, and 6.4% (36) had regular unprotected sex.

Conclusion: More than one-fifth of adolescent girls were sexually active in this study. Sexual intercourse started mostly at the age of 16 or less, and it was mostly occasional. Half of the cases had multiple sexual partners, and half were not using condoms during sexual intercourse. We, thus, recommend the implementation of interventions aimed at delaying the age of the first sexual intercourse and accessibility of condoms to students in this setting.

Keywords: Adolescent school girls, Cameroon, Condom use, Sexual activity, Sexually transmitted infections, Unwanted pregnancies.

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* Corresponding Author:
Foumane Pascal, Yaoundé
Gynaeco-Obstetric and
Pediatric Hospital Hospi-
tal, P.O. Box 4362 Ya-
oundé, Cameroon
E-mail:
pfoumane2004@yahoo.fr

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Introduction

Sexual activity in adolescent girls can lead to serious consequences in their reproductive lives. These consequences include early preg-

nancies and unsafe abortions, which are major causes of maternal mortality, and obstetric and neonatal morbidity and mortality (1). Through ac-

quired sexually transmitted infections, sexual activity can be responsible for infertility, ectopic pregnancies, human immunodeficiency virus (HIV) infections, and cervical or liver cancers through hepatitis B infection (1, 2).

The degree of sexual activity in adolescents depends on the socio-cultural and socio-economic context. In France in 2008, women had their first sexual contact at a mean age of 17.6 years (3). In the USA in 2007, 47.8% of adolescents had their first sexual intercourse during secondary school studies (4). Girls in Transkei in South Africa start their sexual activity at a mean age of 14.86 years, whereas 54% of Congolese high school students admitted being sexually active (5–6). In 2001, Anophie et al. found a 25.7% prevalence for sexual intercourse among 534 Nigerian female secondary school students (7).

Cameroon is a country with a population of about twenty millions inhabitants, situated in the Gulf of Guinea, Central Africa (8). In Yaoundé, most (81.2%) adolescent girls go to a secondary school. Although by then 28.24% of them have started reproductive life, only 15.4% live in the main cities, Yaoundé and Douala (9). The Third Demographic and Health Survey performed in 2004 noted that the mean age of the first sexual contact was 16.5 years (9). According to the Multi Indicator Cluster Survey (MICS) in Cameroon in 2011, 8.9% of sexually active women living in Yaounde carry HIV infection while only 3.6% of their male counterparts are infected. The same survey noted an HIV prevalence of 2% among adolescent girls (10).

Ever since Kamtchuing et al. reported a 52% prevalence for sexual activity in Yaounde secondary schools in 1997 (11), few studies describing sexual activity in Cameroonian school adolescents have been reported. The aim of this study was, therefore, to describe the degree of sexual activity in adolescent girls in Lycée Général Leclerc which is a main public secondary school in Yaounde.

Methods

This is a cross-sectional study with a prolective collection of data, carried out at Lycée General Leclerc, Yaounde, Cameroon, for two months from October 1st to November 30th, 2011. Lycée General Leclerc is the first public secondary school in Cameroon existing since 1952. It is also the largest in Yaounde, and had 6393 students of

which 3136 were girls during the 2011-2012 academic year. Most of the students in this school were of urban origin and seemed to be more under the influence of modern or western lifestyles than traditional models. All consenting girl students aged 10 to 19 years were included in the study. Authorizations were obtained from the school authorities and the National Ethical Committee, and a consent form was proposed to the girls after explaining the importance and objectives of the study. The form was signed by the student and a parent or guardian. A pretested questionnaire was then given to be filled by the students. A heterosexual coital contact was only considered But not a homosexual contact or a non-coital sex. A total of 2660 questionnaires were filled. The data were analyzed using Epi Info 3.2.1 and Microsoft Excel 2007 software.

Results

In total, 2660 adolescents responded to the questionnaire. The mean age of the respondents was 14.7 years and they ranged from 10 to 19 years. A minority (2.5%) of the adolescents reported being married. The mean age of menarche was 12.4 years, and out of 2017 adolescents who had already had their menstruation, 18.1% did not know the date of their last menstrual period.

Five hundred and sixty six (21.3%) respondents admitted being sexually active. Out of these, only 127 (22.4%) of the sexually active respondents were aged less than 17 years (Table 1), 364 (64.3%) were 16 years or less at the time they started having sex (Table 2), and 161 (28.8%) started having heterosexual sex between 16 and 17 years of age.

Table 1. Age distribution of all the recruited adolescent girls by ever experiencing sexual intercourse

Age groups (years)	Ever had sexual intercourse		
	Yes (%)	No (%)	Total
10-11	0 (0.0)	114 (100.0)	114
11-12	1 (0.4)	276 (99.6)	277
12-13	2 (0.7)	304 (99.3)	306
13-14	2 (0.7)	293 (99.3)	295
14-15	5 (1.8)	266 (98.2)	271
15-16	26 (10.3)	227 (89.7)	253
16-17	91 (29.4)	219 (70.6)	310
17-18	110 (36.1)	195 (63.9)	305
18-19	178 (57.4)	132 (42.6)	310
19-20	151 (68.9)	68 (31.1)	219
Total	566 (21.3)	2094 (78.7)	2660

Table 2. Age distribution of the sexually active girls at their first sexual intercourse.

Age at first sexual intercourse (Years)	Number	Percentage (%)	Cumulative percentage
10-11	6	1.1	1.1
11-12	47	8.3	9.4
12-13	52	9.2	18.6
13-14	30	5.3	23.9
14-15	36	6.4	30.3
15-16	32	5.6	35.9
16-17	161	28.4	64.3
17-18	115	20.3	84.6
18-19	62	11.0	95.6
19-20	25	4.4	100.0
Total	566	100.0	--

The rate of sexual activity increased with age, varying from 0% at 10 years of age to 68.9% at the age of 19.

The mean age stated at the first sexual intercourse was 15.3 years. Furthermore, 64.3% of the students were 16 years or less at their first sexual intercourse, and only 35.7% were older than 16 years (Table 2).

Two (0.4%) sexually active teenage girls had not had their first menstruation, while six (1.1%) had their first sexual experience at the age of 10 years or less (Table 2).

Although 56.4% (319) in sexual activity of the sexually active respondents had only one sex partner, 43.6% (247) had at least two, and 17% (96) had at least three.

Sexual activity was occasional in 71.4% of the respondents. About 22.6% (128) of the sexually active respondents had sex on monthly and only 6% (34) on weekly bases.

Out of 52.1% (295) sexually active adolescent girls who used condoms during sexual intercourse, 41.5% (235) did so only occasionally, and 6.4% (36) had regular unprotected sex.

Of the 566 sexually active girls, 22 had delivered a live baby, and 35 had an abortion, giving a pregnancy rate of 10.1% among sexually active school adolescent girls. Most of these pregnancies (61.4%) had ended in induced abortions.

Discussion

The prevalence rate of sexual activity in these adolescent school girls was 21.3 %. A study conducted in Nigeria in 2001 among female secondary school students showed a sexual intercourse prevalence of 25.7% (7). The similarity with our

findings may be explained by the fact that Cameroon and Nigeria are neighboring countries and might have a similar socio-cultural profile. In Yaounde in 1997, it was observed that 52% of the students were sexually active (11), but they included older girls (aged 12 years and more), and the study did not separate female and male students. In Gabon, which is another neighboring country to Cameroon, a sexual activity rate of 48.6% was reported among 1469 adolescent boys and girls, with the age of the first sexual intercourse being 15 years for boys and 13.6 for girls (12). The reported high prevalence of sexual activity in Gabon and the subsequent early onset of sexual intercourse in Gabonese adolescent girls, can be explained by the inclusion criteria. As girls and boys, as well as schooled and unschooled adolescents were included in the study (12). However, a higher prevalence (76%) of sexual activity among adolescent school girls in rural Transkei, in South Africa, was observed in 1996 (5). The authors explained this high prevalence by the fact that the girls had early sexual maturation in that setting, as the age at first sexual intercourse was correlated with age at menarche.

Our study indicated that the rate of sexual activity increased with age and class level. This could be explained by the facts that increase in sexual maturity and libido occurs with age. We noted that 9.4% of the sexually active respondents had their first sexual intercourse at the age of 11 or less. This is similar to the prevalence (12.4%) of sexual activity before the age of 11 years observed in Nigeria (7). Moreover, 64.4% of the school girls had had their first sexual experience at 16 years or even less. This rate indicates that the ma-

majority of our sexually active adolescent school girls had an early sexual activity at a mean age of 15.3 years.

Early sexual activity is a well known risk factor for social and health hazards, with dramatic consequences such as sexual and social instability, unwanted pregnancies, unsafe abortions, sexually transmissible infections, infertility, ectopic pregnancy, and cervical cancer (1, 13–15). Implementing interventions to delay the first sexual intercourse in this population is, therefore, a challenge for our decision-makers.

The cumulative number of sex partners is a known risk factor for unintended pregnancies, HIV infection, and other sexually transmitted infections (15–17). Almost half of our sexually active respondents had had at least two sexual partners before the end of secondary school. This situation is probably related to exposure to pornography, as noted in an American study (18).

Most of the sexually active respondents (71.4%) in our study, had occasional sex. Moreover, 47.9% of them admitted having unprotected sex. In fact, occasional and unprotected sex are risk factors for HIV and other sexually transmitted infections. Condom use is often poor in occasional sex. In fact, early sexual intercourse has been shown to be associated with unprotected and unplanned sex and, casual and multiple sex partners (19). On the other hand, availability of condoms in secondary schools has been shown to increase the rate of condom use among school adolescents (20).

Our results must be considered with some limitations as a self-administered questionnaire may sometimes be less reliable, as some adolescent girls might have given wrong answers to the questions. Moreover, respondents might have forgotten some dates or events that occurred in the past. All these might give some bias to our results.

Conclusion

More than a fifth of teenage school girls were sexually active in this study. The first sexual intercourse occurred at the mean age of 15.3 years in this school, and sexual activity was most often occasional. Changing sex partners and multiple partners occurred in almost half of the sexually active adolescents. Furthermore, regular use of condoms during sexual intercourse was done in only half of the respondents. Pregnancies from this sexual activity usually ended up in induced abortions. We thus recommend the implementa-

tion of interventions aimed at delaying the age of the first sexual intercourse and accessibility of condoms to students in this setting.

Conflict of Interest

None of the authors had any conflict of interest.

References

1. De Muylder X. [The sexual health of adolescent girl]. *Louvain Med.* 2004;123(2):52-9. French.
2. Hamada H, Zaki A, Nejjar H, Filali A, Chraïbi C, Bezaïd R, et al. [Pregnancy and delivery in adolescents: characteristics and profile of 311 cases]. *J Gynecol Obstet Biol Reprod.* 2004;33(7):607-14. French.
3. Bajos N, Bozon M. [Survey on sexuality in France: practice, gender and health]. 1st ed. Paris: La Découverte; 2008. p 117-47. French.
4. Centers for Disease Control and Prevention [Internet]. USA: Centers for Disease Control and Prevention; Trends in the prevalence of sexual behaviors national YRBS: 1991-2007; [cited 2012 Jul 8]; [about 2 screens]. Available from: http://ppt-elect.center-chool.org/providers/304/yrbs07_us_sexual_behaviors_trend.pdf
5. Buga GA, Amoko DH, Ncayiyana DJ. Sexual behaviour, contraceptive practice and reproductive health among school adolescents in rural Transkei. *S Afr Med J.* 1996;86(5):523-7.
6. Courtois R, Mullet E, Malvy D. [Survey on sexual behavior by Congolese and French high-school students in an AIDS context]. *Sante.* 2001;11(1):49-55. French.
7. Anochie IC, Ikpeeme EE. Prevalence of sexual activity and outcome among female secondary school students in Port Harcourt, Nigeria. *Afr J Reprod Health.* 2001;5(2):63-7.
8. Cameroon's National Institute of Statistics [Internet]. Cameroon: National Institute of Statistics of Cameroon; The population of Cameroon in 2010; [cited 2012 Nov 21]; Available from: <http://www.statistics-cameroon.org/>
9. Cameroon's National Institute of Statistics [Internet]. Cameroon: National Institute of Statistics of Cameroon; Third demographic and health survey, 2004; [cited 2012 May 17]; Available from: <http://www.statistics-cameroon.org/>
10. Cameroon's National Institute of Statistics [Internet]. Cameroon: National Institute of Statistics of Cameroon; Results of the fourth demographic and health survey (DHS) combined with the multiple indicators cluster survey (MICS) of 2011; [cited 2012 May 17]; Available from: <http://www.statistics-cameroon.org/>

11. Kamtchouing P, Takougang I, Ngoh N, Yakam I. [Sexuality of adolescent students in Yaounde (Cameroon)]. *Contracept Fertil Sex*. 1997;25(10): 798-801. French.
12. Mimbila-Mayi M, Nzame Vierin Y, Biloghe AS, Moussavou A. Connaissances et comportements des adolescents en matière de santé sexuelle au Gabon. *Clin Mother Child Health*. 2011;8.
13. Makenzius M, Larsson M. Early onset of sexual intercourse is an indicator for hazardous lifestyle and problematic life situation. *Scand J Caring Sci*. 2013;27(1):20-6.
14. Westhoff WW, McDermott RJ, Holcomb DR. HIV risk behaviors: a comparison of U.S. Hispanic and Dominican Republic youth. *AIDS Educ Prev*. 1996;8(2):106-14.
15. Bumbuliene Z, Alisauskas J. Sexual behavior and high-risk human papillomavirus in 15- to 22-year-old Lithuanian women. *Acta Obstet Gynecol Scand*. 2012;91(4):511-3.
16. Kurewa NE, Mapingure MP, Munjoma MW, Chirenje MZ, Rusakaniko S, Stray-Pedersen B. The burden and risk factors of Sexually Transmitted Infections and Reproductive Tract Infections among pregnant women in Zimbabwe. *BMC Infect Dis*. 2010;10:127.
17. Valois RF, Oeltmann JE, Waller J, Hussey JR. Relationship between number of sexual intercourse partners and selected health risk behaviors among public high school adolescents. *J Adolesc Health*. 1999;25(5):328-35.
18. Braun-Courville DK, Rojas M. Exposure to sexually explicit Web sites and adolescent sexual attitudes and behaviors. *J Adolesc Health*. 2009;45(2): 156-62.
19. Langille DB, Asbridge M, Flowerdew G, Allen M. Associations of sexual risk-taking with having intercourse before 15 years in adolescent females in Cape Breton, Nova Scotia, Canada. *Sex Health*. 2010;7(2):199-204.
20. Schuster MA, Bell RM, Berry SH, Kanouse DE. Impact of a high school condom availability program on sexual attitudes and behaviors. *Fam Plann Perspect*. 1998;30(2):67-72.